

A070us.txt

SEQUENCE LISTING

<110> BIOGEN, INC.
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SCHNEIDER, Pascal

<120> BAFF, Inhibitors Thereof and Their Use
in the Modulation of B-Cell Response

<130> A070 US

<150> 60/117,169
<151> 1999-01-25

<150> 60/143,228
<151> 1999-07-09

<150> PCT/US00/01788
<151> 2000-01-25

<160> 22

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 218
<212> PRT
<213> Homo Sapien

<400> 1
Met Asp Asp Ser Thr Glu Arg Glu Gln Ser Arg Leu Thr Ser Cys Leu
1 5 10 15
Lys Lys Arg Glu Glu Met Lys Leu Lys Glu Cys Val Ser Ile Leu Pro
20 25 30
Arg Lys Glu Ser Pro Ser Val Leu Leu Ser Cys Cys Leu Thr Val Val
35 40 45
Ser Phe Tyr Gln Val Ala Ala Leu Gln Gly Asp Leu Ala Ser Leu Arg
50 55 60
Ala Glu Leu Gln Gly His His Ala Glu Lys Leu Pro Ala Gly Ala Lys
65 70 75 80
Ile Phe Glu Pro Pro Ala Pro Gly Glu Gly Asn Ser Ser Gln Asn Ser
85 90 95
Arg Asn Lys Arg Ala Val Gln Gly Pro Glu Glu Thr Val Thr Gln Asp
100 105 110
Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr Ile Gln Lys Gly

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| | 115 | | 120 | | 125 | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Tyr | Thr | Phe | Val | Pro | Trp | Leu | Leu | Ser | Phe | Lys | Arg | Gly | Ser | Ala |
| 130 | | | | | | 135 | | | | | 140 | | | | |
| Leu | Tyr | Gly | Gln | Val | Leu | Tyr | Thr | Asp | Lys | Thr | Tyr | Ala | Met | Gly | His |
| 145 | | | | | | 150 | | | | | 155 | | | | 160 |
| Leu | Ile | Gln | Arg | Lys | Lys | Val | His | Val | Phe | Gly | Asp | Glu | Leu | Ser | Leu |
| | | | | | | 165 | | | | | 170 | | | | 175 |
| Val | Thr | Leu | Phe | Arg | Cys | Ile | Gln | Asn | Leu | Glu | Glu | Gly | Asp | Glu | Leu |
| | | | | | | 180 | | | | | 185 | | | | 190 |
| Gln | Leu | Ala | Ile | Pro | Arg | Glu | Asn | Ala | Gln | Ile | Ser | Leu | Asp | Gly | Asp |
| | | | | | | 195 | | | | | 200 | | | | 205 |
| Val | Thr | Phe | Phe | Gly | Ala | Leu | Lys | Leu | Leu | | | | | | |
| | | | | | | 210 | | | | | 215 | | | | |

<210> 2

<211> 232

<212> PRT

<213> Murine

<400> 2

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| Met | Asp | Glu | Ser | Ala | Lys | Thr | Leu | Pro | Pro | Pro | Cys | Leu | Cys | Phe | Cys |
| 1 | | | | | 5 | | | | 10 | | | | | 15 | |
| Ser | Glu | Lys | Gly | Glu | Asp | Met | Lys | Val | Gly | Tyr | Asp | Pro | Ile | Thr | Pro |
| | | | | | | 20 | | | 25 | | | | | 30 | |
| Gln | Lys | Glu | Glu | Gly | Ala | Val | Leu | Leu | Ser | Ser | Ser | Phe | Thr | Ala | Met |
| | | | | | | 35 | | | 40 | | | | | 45 | |
| Ser | Leu | Tyr | Gln | Leu | Ala | Ala | Leu | Gln | Ala | Asp | Leu | Met | Asn | Leu | Arg |
| | | | | | | 50 | | | 55 | | | | | 60 | |
| Met | Glu | Leu | Gln | Ser | Tyr | Arg | Gly | Ser | Ala | Thr | Pro | Ala | Ala | Ala | Lys |
| | | | | | | 65 | | | 70 | | | | | 80 | |
| Leu | Leu | Thr | Pro | Ala | Ala | Pro | Arg | Pro | His | Asn | Ser | Ser | Arg | Gly | His |
| | | | | | | 85 | | | 90 | | | | | 95 | |
| Arg | Asn | Arg | Arg | Ala | Phe | Pro | Gly | Pro | Glu | Glu | Thr | Glu | Gln | Asp | Val |
| | | | | | | 100 | | | 105 | | | | | 110 | |
| Asp | Leu | Ser | Ala | Pro | Pro | Ala | Leu | Arg | Asn | Ile | Ile | Gln | Asp | Cys | Leu |
| | | | | | | 115 | | | 120 | | | | | 125 | |
| Gln | Leu | Ile | Ala | Asp | Ser | Asp | Thr | Pro | Thr | Ile | Arg | Lys | Gly | Thr | Tyr |
| | | | | | | 130 | | | 135 | | | | | 140 | |
| Thr | Phe | Val | Pro | Trp | Leu | Leu | Ser | Phe | Lys | Arg | Gly | Asn | Ala | Leu | Tyr |
| | | | | | | 145 | | | 150 | | | | | 160 | |
| Ser | Gln | Val | Leu | Tyr | Thr | Asp | Pro | Ile | Phe | Ala | Met | Gly | His | Val | Ile |
| | | | | | | 165 | | | 170 | | | | | 175 | |
| Gln | Arg | Lys | Lys | Val | His | Val | Phe | Gly | Asp | Glu | Leu | Ser | Leu | Val | Thr |
| | | | | | | 180 | | | 185 | | | | | 190 | |
| Leu | Phe | Arg | Cys | Ile | Gln | Asn | Leu | Glu | Glu | Gly | Asp | Glu | Ile | Gln | Leu |
| | | | | | | 195 | | | 200 | | | | | 205 | |
| Ala | Ile | Pro | Arg | Glu | Asn | Ala | Gln | Ile | Ser | Arg | Asn | Gly | Asp | Asp | Thr |
| | | | | | | 210 | | | 215 | | | | | 220 | |
| Phe | Phe | Gly | Ala | Leu | Lys | Leu | Leu | | | | | | | | |
| | | | | | | 225 | | | 230 | | | | | | |

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<210> 3
<211> 102
<212> PRT
<213> Homo Sapien

<400> 3
Val Thr Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr
1 5 10 15
Ile Gln Lys Gly Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys
20 25 30
Arg Gly Ser Ala Leu Glu Glu Lys Tyr Gly Gln Val Leu Tyr Thr Asp
35 40 45
Lys Thr Tyr Ala Met Gly His Leu Ile Gln Arg Lys Lys Val His Val
50 55 60
Phe Gly Asp Glu Leu Ser Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala
65 70 75 80
Lys Leu Glu Glu Gly Asp Glu Leu Gln Leu Ala Ile Pro Arg Glu Asn
85 90 95
Ala Gln Ile Ser Leu Asp
100

<210> 4
<211> 96
<212> PRT
<213> Homo Sapien

<400> 4
Lys Gln His Ser Val Leu His Leu Val Pro Ile Asn Ala Thr Ser Lys
1 5 10 15
Asp Asp Ser Asp Val Thr Glu Val Met Trp Gln Pro Ala Leu Arg Arg
20 25 30
Gly Arg Gly Leu Gln Ala Gln Tyr Ser Gln Val Leu Phe Gln Asp Val
35 40 45
Thr Phe Thr Met Gly Gln Val Val Ser Arg Glu Gly Gln Gly Arg Ala
50 55 60
Tyr Asn Ser Cys Tyr Ser Ala Gly Val Phe His Leu His Gln Gly Asp
65 70 75 80
Ile Leu Ser Val Ile Ile Pro Arg Ala Arg Ala Lys Leu Asn Leu Ser
85 90 95

<210> 5
<211> 104
<212> PRT
<213> Homo Sapien

<400> 5
Ser Asp Lys Pro Val Ala His Val Val Ala Asn Pro Gln Ala Glu Gly
1 5 10 15
Gln Leu Gln Trp Leu Asn Arg Arg Ala Asn Ala Leu Leu Ala Asn Gly
20 25 30
Val Tyr Ser Gln Val Leu Phe Lys Gly Gln Gly Cys Pro Ser Thr His

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35 40 45
Val Leu Leu Thr His Thr Ile Ser Arg Ile Ala Val Ser Tyr Gln Thr
50 55 60
Glu Gly Ala Glu Ala Lys Pro Trp Tyr Glu Pro Ile Tyr Leu Gly Gly
65 70 75 80
Val Phe Gln Leu Glu Lys Gly Asp Arg Leu Ser Ala Glu Ile Asn Arg
85 90 95
Pro Asp Tyr Leu Asp Phe Ala Glu
100

<210> 6
<211> 97
<212> PRT
<213> Homo Sapien

<400> 6
Glu Leu Arg Lys Val Ala His Leu Thr Gly Lys Ser Asn Ser Arg Ser
1 5 10 15
Met Pro Leu Glu Trp Glu Asp Thr Tyr Gly Ile Val Leu Leu Ser Gly
20 25 30
Val Lys Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys Asn Asn Leu
35 40 45
Pro Leu Ser His Lys Val Tyr Met Arg Asn Ser Lys Tyr Pro Gln Met
50 55 60
Trp Ala Arg Ser Ser Tyr Leu Gly Ala Val Phe Asn Leu Thr Ser Ala
65 70 75 80
Asp His Leu Tyr Val Asn Val Ser Glu Leu Ser Leu Val Asn Phe Glu
85 90 95
Glu

<210> 7
<211> 102
<212> PRT
<213> Homo Sapien

<400> 7
Thr Leu Lys Pro Ala Ala His Leu Ile Gly Asp Pro Ser Lys Gln Asn
1 5 10 15
Ser Leu Leu Trp Arg Ala Asn Thr Asp Arg Ala Phe Leu Gln Asp Gly
20 25 30
Phe Tyr Ser Gln Val Val Phe Ser Gly Lys Ala Tyr Ser Pro Lys Ala
35 40 45
Thr Ser Ser Pro Leu Tyr Leu Ala His Glu Val Gln Leu Phe Ser Ser
50 55 60
Gln Tyr Pro Phe Pro Trp Leu His Ser Met Tyr His Gly Ala Ala Phe
65 70 75 80
Gln Leu Thr Gln Gly Asp Gln Leu Ser Thr His Thr Asp Gly Ile Pro
85 90 95
His Leu Val Leu Ser Phe
100

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<210> 8
<211> 109
<212> PRT
<213> Homo Sapien

<400> 8
Glu Ala Gln Pro Phe Ala His Leu Thr Ile Asn Ala Thr Asp Ile Pro
1 5 10 15
Ser Gly Ser His Lys Val Ser Leu Ser Ser Trp Tyr His Asp Arg Gly
20 25 30
Trp Gly Lys Ile Ser Asn Met Tyr Ala Asn Ile Cys Phe Arg His His
35 40 45
Glu Thr Ser Gly Asp Leu Ala Thr Glu Tyr Leu Gln Leu Met Val Tyr
50 55 60
Val Thr Lys Thr Ser Ile Lys Ile Pro Ser Glu Phe His Phe Tyr Ser
65 70 75 80
Ile Asn Val Gly Gly Phe Phe Lys Leu Arg Ser Gly Glu Glu Ile Ser
85 90 95
Ile Glu Val Ser Asn Pro Ser Leu Leu Asp Pro Asp Gln
100 105

<210> 9
<211> 26
<212> DNA
<213> Homo Sapien

<400> 9
actgtttctt ctggaccctg aacggc
26

<210> 10
<211> 30
<212> DNA
<213> Homo Sapien

<400> 10
gacaagcttg ccaccatgga tgactccaca
30

<210> 11
<211> 23
<212> DNA
<213> Homo Sapien

<400> 11
actagtgcaca gcagttcaa tgc
23

<210> 12
<211> 22

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<212> DNA
<213> Homo Sapien

<400> 12
ctgcagggtc cagaagaaac ag
22

<210> 13
<211> 24
<212> DNA
<213> Homo Sapien

<400> 13
ggagaaggca actccagtca gaac
24

<210> 14
<211> 24
<212> DNA
<213> Homo Sapien

<400> 14
caattcatcc ccaaagacat ggac
24

<210> 15
<211> 22
<212> DNA
<213> Homo Sapien

<400> 15
tcggaacaca acgaaacaag tc
22

<210> 16
<211> 26
<212> DNA
<213> Homo Sapien

<400> 16
cttctccttc acctggaaac tgactg
26

<210> 17
<211> 19
<212> DNA
<213> Homo Sapien

<400> 17
ggcatcgta tggactccg
19

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<210> 18
<211> 19
<212> DNA
<213> Homo Sapien

<400> 18
gcttggaaagggt ggacagcga
19

<210> 19
<211> 35
<212> DNA
<213> Homo Sapien

<400> 19
taagaatgcg gccgcggaat ggatgagtct gcaaa
35

<210> 20
<211> 35
<212> DNA
<213> Homo Sapien

<400> 20
taagaatgcg gccgcggat cacgcactcc agcaa
35

<210> 21
<211> 21
<212> DNA
<213> Homo Sapien

<400> 21
gcagtttcac agcgatgtcc t
21

<210> 22
<211> 21
<212> DNA
<213> Homo Sapien

<400> 22
gtctccgttg cgtgaaatct g
21